

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) An isolated polypeptide selected from the group consisting of:
  - (a) an isolated polypeptide encoded by a polynucleotide comprising the sequence of SEQ ID NO:1;
  - (b) an isolated polypeptide comprising a polypeptide sequence having at least 95% identity to the polypeptide sequence of SEQ ID NO:2;
  - (c) an isolated polypeptide comprising the polypeptide sequence of SEQ ID NO:2;
  - (d) an isolated polypeptide having at least 95% identity to the polypeptide sequence of SEQ ID NO:2; and
  - (e) the polypeptide sequence of SEQ ID NO:2; ~~and~~
  - ~~(f) fragments and variants of such polypeptides in (a) to (e);~~wherein the polypeptides of (a) – (e) have methionyl tRNA synthetase activity.

2. (currently amended) An isolated polynucleotide selected from the group consisting of:
  - (a) an isolated polynucleotide comprising a polynucleotide sequence having at least 95% identity to the polynucleotide sequence of SEQ ID NO:1;
  - (b) an isolated polynucleotide comprising the polynucleotide of SEQ ID NO:1;
  - (c) an isolated polynucleotide having at least 95% identity to the polynucleotide of SEQ ID NO:1;
  - (d) the isolated polynucleotide of SEQ ID NO:1;
  - (e) an isolated polynucleotide comprising a polynucleotide sequence encoding a polypeptide sequence having at least 95% identity to the polypeptide sequence of SEQ ID NO:2;
  - (f) an isolated polynucleotide comprising a polynucleotide sequence encoding the polypeptide of SEQ ID NO:2;
  - (g) an isolated polynucleotide having a polynucleotide sequence encoding a polypeptide sequence having at least 95% identity to the polypeptide sequence of SEQ ID NO:2;
  - (h) an isolated polynucleotide encoding the polypeptide of SEQ ID NO:2;

(i) an isolated polynucleotide with a nucleotide sequence of at least 100 nucleotides obtained by screening a library under stringent hybridization conditions with a labeled probe having the sequence of SEQ ID NO: 1 or a fragment thereof having at least 15 nucleotides, wherein said stringent hybridization conditions comprise include overnight incubation at 42 °C in a solution comprising: 50% formamide, 5xSSC (150mM NaCl, 15mM trisodium citrate), 50 mM sodium phosphate (pH 7.6), 5x Denhardt's solution, 10 % dextran sulfate, and 20 microgram/ml denatured, sheared salmon sperm DNA; followed by washing the filters in 0.1x SSC at about 65 °C; and

(j) a polynucleotide which is the RNA equivalent of a polynucleotide of (a) to (i); and

~~or (k) a polynucleotide sequence complementary to said isolated~~ a polynucleotide of (a) to (i)

~~and polynucleotides that are variants and fragments of the above mentioned polynucleotides or that are complementary to above mentioned polynucleotides, over the entire length thereof;~~

wherein the polynucleotides of (a) – (k) encode a polypeptide having methionyl tRNA synthetase activity.

3. (currently amended) An antibody immunospecific for the polypeptide of ~~claim 1~~ SEQ ID NO:2.

4. (original) An antibody as claimed in claim 3 which is a polyclonal antibody.

5. (original) An expression vector comprising a polynucleotide capable of producing a polypeptide of claim 1 when said expression vector is present in a compatible host cell.

6. (original) A process for producing a recombinant host cell which comprises the step of introducing an expression vector comprising a polynucleotide capable of producing a polypeptide of claim 1 into a cell such that the host cell, under appropriate culture conditions, produces said polypeptide.

7. (original) A recombinant host cell produced by the process of claim 6.

8. (original) A membrane of a recombinant host cell of claim 7 expressing said polypeptide.

9. (original) A process for producing a polypeptide which comprises culturing a host cell of claim 7 under conditions sufficient for the production of said polypeptide and recovering said polypeptide from the culture.